

**U.S. EPA REGION VIII
TECHNICAL ENFORCEMENT PROGRAM
RCRA COMPLIANCE EVALUATION INSPECTION REPORT**

Facility: Frontier Refining, Inc.
2700 East 5th Street
Cheyenne, WY 82007

Facility Contact: Scott Denton
Environmental Engineer

EPA I.D. No.: WYD051843613

Notification Status: LQG

Inspection Type: Corrective Action Compliance Inspection
For Pond 2 Clean-Out

Date: October 31, 2011

Time In: 11:05 a.m.

Time Out: 3:00 p.m.

**EPA
Representatives:** Linda Jacobson, EPA Inspector
Margo Smith, EPA Corrective Action
Moye Lin, State Liason

Background:

Frontier Refining, Inc. operates a petroleum refinery in Cheyenne, Wyoming that produces asphalt, fuels, coke, and liquefied petroleum gas. On May 27, 2010, Frontier and EPA entered into a Consent Agreement to address the closure of Pond 2 surface impoundment. This inspection was prearranged and scheduled with facility representatives as a follow-up to observe the progress in waste removal, cleaning, and closure activities for the Pond 2 waste impoundment.

The EPA RCRA representatives, Ms. Jacobson, Ms. Smith, and Ms. Lin, arrived at the facility at 11:05 a.m. and were greeted by Mr. Scott Denton with Frontier's environmental department. Ms. Jacobson presented her credentials, explained the scope of the inspection, and completed the Notice of Inspection (NOI) Form. Entry was gained by consent as noted on the attached NOI form.

Physical Site Inspection

In his office, Mr. Denton provided Ms. Lin an overview of the facility processes and products. The EPA representatives were also given a physical overview of the facility during a drive through the site in the facility truck.

After a lunch break, Mr. Denton drove Ms. Jacobson to the site of the three pads used for storage of removed clay and soils from Pond 2. Two of the pads were empty except for recent precipitation. The snowmelt in the pads was to be removed and treated in the onsite wastewater treatment plant. One of the pads contained approximately 300 cubic yards of contaminated clay scraped from the surface of the clay layer. Mr. Denton stated that the facility planned to collect one composite sample of the clay for analysis for hazardous waste determination.

They then drove to the Pond 2 site where Ms. Jacobson was shown the current status of the Pond 2 closure work. Mr. Denton showed Ms. Jacobson the area where there had formerly been a walkway, submersible pump and concrete sump. The excavation extended below the clay liner in this area, and as Mr. Denton pointed out, the staining below the clay liner appeared to be due to groundwater impacts and was outside the scope of the consent agreement closure activities. The facility plans to install a pump to stop groundwater from flowing into the former Pond 2.

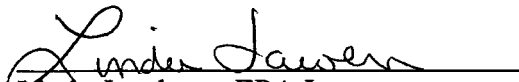
Ms. Jacobson was shown the materials removed from the pond. The oil-contaminated concrete will be sent to a non-hazardous landfill. The soft-top rolloffs contained the Pond 2 synthetic liner and were labeled as "Pond 2 Liner Pending Analysis 10/20/11". There were three hard top roll-offs which were labeled as "Pond 2 Sludge Pending Analysis 10/24/11". These three roll-offs contained the geofabric as well as the stained sand and soils removed from between the synthetic and clay liners.

Ms. Jacobson and Mr. Denton returned to his office and were rejoined by Ms. Smith and Ms. Lin who had stayed behind to review corrective action materials.

Closing Conference:

Ms. Jacobson completed the NOI form and held a short closing conference. No concerns were noted for the scope of the inspection conducted. Photographic documentation was collected and is included as Attachment 2 to this report.

Prepared By:


Linda Jacobson, EPA Inspector

November 17, 2011
Date

Attachments:

Attachment 1: Notice of Inspection Form

Attachment 2: Photographs and Photolog

ATTACHMENT 1
NOTICE OF INSPECTION FORM

U.S. ENVIRONMENTAL PROTECTION AGENCY (REGION VIII)

1595 Wynkoop Street, Denver, CO 80202

NOTICE OF INSPECTION

<input checked="" type="checkbox"/> Resource Conservation and Recovery Act (RCRA) Public Law 94-580, as amended.
<input type="checkbox"/> Toxic Substance Control Act (TSCA) Public Law 94-469, as amended.
<input type="checkbox"/> Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Public Law 92-516, as amended.

Date 10/31/11	Inspector #	Daily Seq.	Hour In: 11:05am Out:	Facility name Frontier Refining, LLC
Fac. Func.	Invest. Type CAO	Reason	RCRA: Gen () Transp. () TSD ()	WYD 051843613
Facility Representative(s) Scott Denton Environmental Engineer			Street 2700 East 5th St.	
Title Engineer			PO Box 1588	
Phone # (307) 771-8731			City Cheyenne	State WY Zip 82003

Reason for Inspection: ☒ Entry by Consent: _____ Warrant: ()

☐ To determine the extent of compliance with the above referenced law, which may require the collection of samples, documents, and/or photographs.

☐ Other (Specify) _____

Violations of above referenced law are suspected from information or complaint. Yes () No ()

Samples, Documents, and /or Photos collected (describe below)	Medium	Date to Lab
1. 27 photos		
2.		
3.		
4.		
5.		
6.		

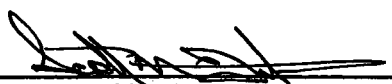
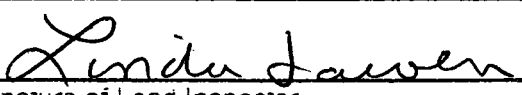
Samples requested and received by facility: () Yes () No

If yes: () Duplicate. () Split. ☒ Photos (To be received when processed.)

This inspection has revealed the following probably violations of EPA laws or regulations.

No violations noted for scope of inspection conducted.

The facts established by this inspection will be reviewed by personnel in the EPA Regional Office. A final determination of your facility's compliance with EPA regulations will be made as a result of this review. The review may reveal additional violations.

Receipt of the Notice of Inspection is acknowledged.  _____ Signature of facility representative	 _____ Signature of Lead Inspector _____ Assisting Inspectors (EPA/Tribe/State)
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ATTACHMENT 2
PHOTOLOG AND PHOTOGRAPHS

PHOTOLOG FOR FRONTIER REFINING INSPECTION

PHOTO.	SUBJECT	DATE
1	Storage Pad for Clay Removed from Pond 2	October 31, 2011
2	Stained Clay Removed from Pond 2	October 31, 2011
3	Lined Pads Constructed for Storage of Clay and Soils	October 31, 2011
4	Lined Storage Pad for Materials Removed from Pond 2	October 31, 2011
5	Status of Clay Liner	October 31, 2011
6	Clay Liner after Removal of Synthetic Liner	October 31, 2011
7	Exposed Clay Liner and Synthetic Liner Remnants To Be Left in Place	October 31, 2011
8	Clay Liner in Pond 2	October 31, 2011
9	Location of Former Concrete Outfall	October 31, 2011
10	Pond 2 Status with Synthetic Liner Removed	October 31, 2011
11	Clay Liner with Minute Ponding from Recent Precipitation	October 31, 2011
12	Former Outfall Area	October 31, 2011
13	Clay Liner	October 31, 2011
14	Clay Liner Around Former Walkway	October 31, 2011
15	Clay Liner with Plugged Inlet Pipes	October 31, 2011
16	Status of Pond 2 Work	October 31, 2011
17	Clay Liner Slightly Moist from Recent Precipitation	October 31, 2011
18	Area to Be Further Remediated, Note Groundwater Intrusion	October 31, 2011
19	Staining to Be Further Addressed	October 31, 2011
20	Staining to Be Further Addressed	October 31, 2011
21	Layers of Stained Soil on Side to Be Remediated as Part of Closure Work	October 31, 2011
22	Pond 2 Clay Liner after Stained Clay, Liner and Geofabric Removal	October 31, 2011
23	Area of Pond Requiring Further Remediation	October 31, 2011
24	Materials Removed from Pond 2	October 31, 2011
25	Concrete Removed from Pond 2	October 31, 2011
26	Sealed Roll-Off Containing Pond 2 Wastes	October 31, 2011
27	Roll-Off Containing Pond 2 Wastes	October 31, 2011

Photo: 1
Facility: Frontier Refining
Subject: Storage Pad for Clay
Removed from Pond 2
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 2
Facility: Frontier Refining
Subject: Stained Clay Removed
from Pond 2
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 3
Facility: Frontier Refining
Subject: Lined Pads Constructed
for Storage of Clay and Soils
Removed from Pond 2
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 4
Facility: Frontier Refining
Subject: Lined Storage Pad for
Materials Removed from Pond 2
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 5
Facility: Frontier Refining
Subject: Status of Clay Liner
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 6
Facility: Frontier Refining
Subject: Clay Liner after Removal of Synthetic Liner
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 7
Facility: Frontier Refining
Subject: Exposed Clay Liner and
Synthetic Liner Remnants to Be
Left in Place
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 8
Facility: Frontier Refining
Subject: Clay Liner in Pond 2
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 9
Facility: Frontier Refining
Subject: Location of Former
Concrete Outfall
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 10
Facility: Frontier Refining
Subject: Pond 2 Status with
Synthetic Liner Removed
Photographer: Linda Jacobson
Date: October 17, 2011



Photo: 11

Facility: Frontier Refining

**Subject: Clay Liner with Minute
Ponding from Recent Precipitation**

Photographer: Linda Jacobson

Date: October 31, 2011



Photo: 12

Facility: Frontier Refining

Subject: Former Outfall Area

Photographer: Linda Jacobson

Date: October 31, 2011



Photo: 13
Facility: Frontier Refining
Subject: Clay Liner
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 14
Facility: Frontier Refining
Subject: Clay Liner Around
Former Walkway
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 15
Facility: Frontier Refining
Subject: Clay Liner with Plugged
Inlet Pipes
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 16
Facility: Frontier Refining
Subject: Status of Pond 2 Work
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 17

Facility: Frontier Refining

**Subject: Clay Liner Slightly
Moist from Recent Precipitation**

Photographer: Linda Jacobson

Date: October 31, 2011



Photo: 18

Facility: Frontier Refining

**Subject: Area to Be Further
Remediated, Note Groundwater
Intrusion**

Photographer: Linda Jacobson

Date: October 31, 2011



Photo: 19
Facility: Frontier Refining
Subject: Staining to Be Further
Addressed
Photographer: Linda Jacobson
Date: October 31, 2011

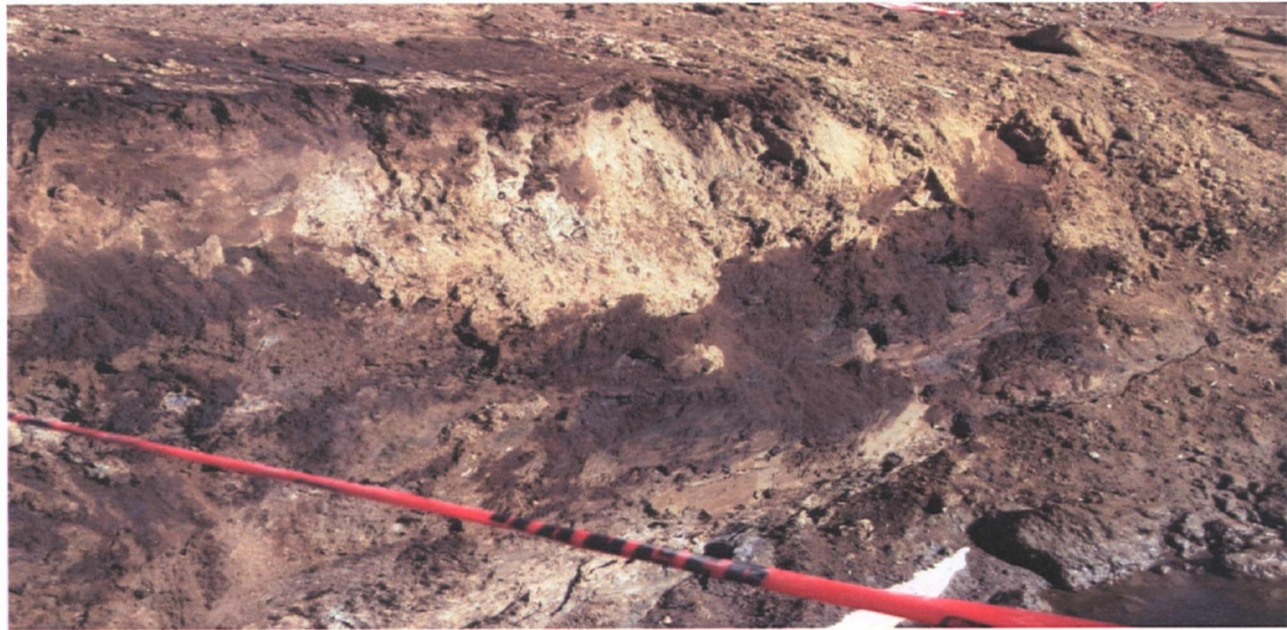


Photo: 20
Facility: Frontier Refining
Subject: Staining to Be Further
Addressed
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 21
Facility: Frontier Refining
Subject: Layers of Stained Soil
on Side to Be Remediated as
Part of Closure Work
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 22
Facility: Frontier Refining
Subject: Pond 2 Clay Liner after
Stained Clay, Liner and Geofabric
Removal
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 23
Facility: Frontier Refining
Subject: Area of Pond Requiring
Further Remediation
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 24
Facility: Frontier Refining
Subject: Materials Removed from
Pond 2
Photographer: Linda Jacobson
Date: October 31, 2011



Photo: 25

Facility: Frontier Refining

**Subject: Concrete Removed from
Pond 2**

Photographer: Linda Jacobson

Date: October 31, 2011



Photo: 26

Facility: Frontier Refining

**Subject: Sealed Roll-off
Containing Pond 2 Wastes**

Photographer: Linda Jacobson

Date: October 31, 2011



Photo: 27
Facility: Frontier Refining
Subject: Roll-off Containing
Pond 2 Wastes
Photographer: Linda Jacobson
Date: October 31, 2011

